



ing once tastes the joy of actually constructing some ar-tistic bit of silversmithy then from that time forward the attraction of the shop made article for her is forever gone. Then, too, she begins to appreciate the value of becoming more and more familiar with the

the work of the ancient craftsmen and out to allow the body of the craftsman to workmanship and exquisite design. Take are constantly in demand. the rich silver flagons and other similar vessels of olden Rome and the ancient jewelry of Egypt and Greece, each specimen of which has in it enough of inspiration of really good art.

Even a visit to the Metropolitan Mu-different gauges or thicknesses. specimens are precisely the sort of thing five cents a pound.

vise. A comman poker held firmly to the away any cracks that may appear to that the average girl desires to make, such To work with there must be a set of floor is sometimes used for a stake. Followers that the average girl desires to make, such To work with there must be a set of floor is sometimes used for a stake. Followers that the average girl desires to make, such To work with there must be a set of floor is sometimes used for a stake. Followers that the average girl desires to make, such To work with there must be a set of floor is sometimes used for a stake. Followers that the average girl desires to make, such To work with there must be a set of floor is sometimes used for a stake.

frequent intervals is necessary. Now this, tals to form a flux in soldering.

To anneal means to heat red bot and cool slowly. This retempers the metal, so to anneal a silver piece on which the beginner is working, lay the metal on a red hot stove or hold in the flame of a gas be allowed to get beyond a cherry red. of making the first two and others of With silver heat to a dull glowing red, their ilk are very similar.

A work bench is advisable, though not in diameter in the centre, each circle b absolutely necessary, as a heavy table, being one-quarter of an inch from the

best methods employed by expert crafts- shelf or window ledge will do, but as on such as is used in the schools for manua She will see new beauties in hand training can be bought for only \$6, it is wrought silver and gold and will delve wisest to invest. It is especially con with all the strength of her new born structed for the convenience of the enthusiasm into the fascinating study of worker, having a semicircular piece cu will see with what small and simple get close to her work, while it is fitted equipment they turned out articles of rare with a vise and blowpipe, both of which

Fancy Receptacle of Beaten Brass

beginner. This can be bought at a tion to carry even the more staid and shop where metal workers' tools are sold. unimaginative student into an apprecia- and it comes already rolled, for the convenience of the worker, in about thirty

seum of Art, in New York, will prove These vary from that of ordinary writ

as bowls, porringers, spoons, ladles, boxes files, round, flat and square; several small lowing the lines of the circles, hammer and all the small silver of the table hand chisels, a draw plate, pliers, suarl-the metal all around and all the small silver of the table hand chisels, a draw plate, pliers, suarl-the metal all around and all the small silver of the table hand chisels, a draw plate, pliers, suarl-the metal all around and all the small silver of the table hand chisels, a draw plate, pliers, suarl-the metal all around and all the small silver of the table hand chisels, a draw plate, pliers, suarl-the metal all around and all the small silver of the table hand chisels, a draw plate, pliers, suarl-the metal all around and all the small silver of the table hand chisels, a draw plate, pliers, suarl-the metal all around and all the small silver of the table hand chisels, a draw plate, pliers, suarl-the metal all around and all the small silver of the table hand chisels, a draw plate, pliers, suarl-the metal all around and all the small silver of the table hand chisels. ing iron, several stakes to hammer the springy feeling. Now it is time to anneal and court bending into some metal over and binding wire for tying it. A point that will help the beginner is principles to remember in doing metal the work together when soldered. A sand to remember in beating the metal to ornate but symmetrical design. Lastly in the vise and struck by a harmer just work. One of the most important is that bag, wooden block and pitch block, on hold the elbow close to the side and let solder the divisions together. any amount of hammering on metal makes which to place the metal while working the movement be from the wrist.

hot stove or hold in the flame of a gas the more complicated work to be atlamp until brought to the bright tempera- tempted later on. Bowls and porringers ture. Copper may be heated until it turns and bonbon boxes are all things that apa bright red color, but brass should never peal to the average girl, and the method

After annealing rinse in water and dry. Say a porringer is selected as the initia-Don't get frightened at the sort of tools tory piece to be constructed. For this necessary for hammered silver work take sheet metal, about 22 gauge, and on They are distinctly masculine, in that it outline a circle which shall be larger they are distinctly associated with the than the vessel's profile. Within this cirwork of men, but when familiar with cle mark with a compass many smaller

a source of immense assistance, for since ing paper to the thickest cardboard. For the time of the Hudson-Fulton celebration ordinary work, such as bonbon boxes and cular disc of metal over a wooden beat- an exquisite manner.

ther. The beginner will find these lines inestimable help in hammer g the netal, for by following each concentric circle in turn the work is bound to be

Bonbon Box with Perforated Cover

NOTHER one of the salient points to be considered in hammering metal is that whenever sheet metal is struck by the hammer the result is that t is either stretched or contracted, and the previously flat surface becomes more the desired shape is secured.

a source of immenso assistance, for since ing paper to the thickest cardboard. For the time of the Hudson-Fulton clebration there has been on exhibition there one of the finest collections of hand wrought silver of the Colonial and other periods in the country. Particularly is this collection valuable to the girl at the beginning of her novitiate, for many of the specimens are precisely the sort of thing.

as any other operation in metal work, No doubt all this sounds like Greek 10 from the centre out, but stopping short solder to the bowl.

as any other operation in metal work, seems rather complicated to the novice, but it is all very simple once the process, but cers and needle, but their use will be shown a like of rom the centre out, but stopping short and instead of the brim. If the bowl gets out of shown only embroidery scissors, stiletto and needle, but their use will be shown a beating block and make it uniform.

To solder is a simple process, but cers to the obtained.

To solder is a simple process, but cers to the obtained of the brim. If the bowl gets out of shown only embroidery scissors, stiletto and needle, but their use will be shown a beating block and make it uniform.

Once again beat the metal from the flux to assist in firmly soldering the parts or less round, according to the hammerjoined should be scraped clean and as with the left hand the bowl is conjoined should be scraped clean and
stantly being turned. To finish the surpainted with a solution of the borax. A
face planish it with a hammer made for
camel's hair brush may be used. The the circles will cause the metal to become the purpose over a polishing stake also parts together with binding wire. Pick almost round. Experience will tell when constructed especially for this operation, up small pieces of solder, dip in bocax This leaves the surface covered with water and place at intervals along the To make the porringer, place the cir-brilliant facets which reflect the light in joint. Heat in the flame, using sligh

Match Receiver of Silver Wire and Silver Sheet

To attach the handle to the porringer brate gently. By inserting this and into

Simple Designs in Hammered Silver

working. They are the snarling !ron

amount of bossing can be obtained.

smaller the silver is drawn to the required lay the work while treating the design. Pitch offers the moderate resistance best

If a small bonbon box is the design to be liked. This can easily be prepared at attempted by the beginner onen the home or can be bought at a place where method of working is quite different and metal workers' tools are sold. If mixed metal the length of the circumference of

something simpler. It is certainly less at home use one-half of Burgundy pitch work unless the ornamentation is very and one-half brick dust, and if this is loo elaborate. In this event a strip of sheet hard add a little linseed oil and rosin. metal the length of the circumference of the box is ent and two circular pieces for top and bottom, though the piece for the block. Pour the mixture over the top must be a shade larger than the it to a depth of one inch and over this bottom in order to slip over the box. A place the metal on which the design Las narrow strip of metal for the bend of been applied with impression paper, the cover is also necessary. First solder pressing it down well and drawing the

Other Pieces in Simple Line Engraving

prevent the pitch from sticking dip the fingers first in water. With a ball headed tool and mallet beat out the design before the pitch has wholly cooled. To remove when finished heat the pitch and clean the work with petroleum. If low relief is desired, then the pattern is brought into relief by beating down the background. In the case of a

so as to hold it firmly when cooled. To

vessel which cannot be laid on the pitch block it must be filled with pitch and the work done on a sandbag. Nothing is more effective for the tops of powder boxes or for trays of various descriptions than the perforated designs which entered largely into the old German work, especially that done in Nuremberg. In the case of soft metal the designs can be cut from the silver by simply

using common shears or a boy's fretsaw. If difficulty is experienced in cutting out the corners simply lay the metal on a small anvil-a common flatiron may be used instead of the anvil-and with a cold chisel cut out the difficult places. With care and patience there is no reaon why a good piece of work should not be turned out at the first trial. If a girl ections given for soldering, add the bot- wishes to get grounded in the principles om and complete the top in the same of metal working there are schools where she can do this, though, as one expert Of course the matter of ornamentation says, it is by thinking and trying, not by some of favor, some preferring the plain being shown, that one learns to produce colished surface of the metal, others reasonable with the same of the sa

oussé work in high or low relief, chasing to begin by doing the simple things well engraving Without a doubt the results will really need no teaching what-

Suggestions for Christmas Gifts.

bowl and beat from the inside, working bend at right angles to the handle and could not be reached by the hammer any boxes and sofa cushions—there is no end be an acceptable gift. to the list. A girl who has many Christ- Metal frames can be bought in all sizes number of attractive presents for those an opera bag or any kind of a shopping to whom only small remembrances are to bag the stiff frame is often preferred.

in the vise and struck by a hammer just - VERYTHING that can possibly be for a friend who wears a cloak or evening above this point allows the other to vi-brate gently. By inserting this and into that material this year. Music rolls terial bordered with silver lace and tied it hard and brittle, so that annealing at on it, are indispensable, and borax crys- After annealing and cooling turn the broaden and flatten the opposite end, a long necked bottle or other vessel which and muffs, opera bags and hats, match with silver ribbon and tassels will surely

be sent, as well as to the few who are to Powder boxes, hatpin cases, nairpin

boxes, appurtenances for the writing The Oriental pattern is to be had in table, book racks and book covers, veil bright colors, with threads of gold or sil- cases, handkerchief cases, even card ver, with a subdued tone at the same cases, are now all made in the Oriental time which gives an illusion of the an- pattern brocade, with its threads of gold ique. This brocade is only to be had in and silver interwoven, instead of the ordilouble width, but, while expensive at nary sllk brocade which was used so

for the ice water that must be left in the For an older woman nothing is so ac- decoration, has now invaded the world ceptable as a large workbag. Lined with of dress. A large pillow muff bordered moments. A smaller size will do nicely ished small flat satin covered muff, over should be pockets in the lining for the sewed only across the centre of the



NE of the first duties of the them in her room if it be possible. If little sets are to be had in pretty china, first thought, there are so many different widely only a year ago. daughter of the house should be she is fond of reading there will be books consisting of a tray, candlestick and match things that can be evolved from the one And this brocade, which formerly os that the guest room is al- on her bed table-poetry, new nevels, his- safe, with a small water pitcher and glass piece that in the end the cost is very little, was used only in the field of hou ways ready for mruncy at a tories-whatever she cares most for. moment's notice. A visitor can If she is leaving home for long there guest room each evening. more quickly be made to feel that will be many letters to be written to her It is not always possible to pack in a old gold or bright blue satin, a brocade all around with a band of fur can easily

them they seem quite as harmless and circles, one within the other, graduating hold if on every side her apartment shows fully stocked with pen, pencils, ink, which the modern girl or we man is so parts of a knitted afghan or a piece of time to fashion a prettily shirred satial simple as described and a piece of time to fashion a prettily shirred satial simple as described and a piece of time to fashion a prettily shirred satial simple as described and a piece of time to fashion a prettily shirred satial simple as described as descr a careful forethought of her comfort than writing paper and stamps. To keep dependent. A small pillov in dainty tapestry that is being worked upon at add facing for the brocade and a nicely fin-Kind words of greeting of course play room will not amount to more than a gotten, but must have its place among the for a piece of embroidery and there which the wide brocade piece is laid and the first part in making the guest feel dollar or two at the outside in the course larger pillows on the divan or bed.

a book of postage stamps in the guest linen case must therefore not be for-

Individual Reference Books.

NOLVIDUAL reference books are discussed to the season of the season of